

WHAT IS CLAIMED IS:

1. A video-on-demand method to reduce a network bandwidth used thereby,
applied to reduce a bandwidth used for a plurality of user terminals to receive a
common video information, wherein the user terminals receive the common video
5 information with a time difference from each other, the method comprising of:

determining whether a second and a second user terminals select the common
video information within the time difference;

inspecting a channel used by the first user terminal to receive the common video
information and a receiving time to receive the common video when the first and
10 second user terminals select the common video information within the time difference;

using an unused channel to output a front video information that the first user
terminal has received, and recording a rear video information that the first user terminal
is currently receiving at the same time; and

continuously receiving the recorded rear video information after the second user
15 terminal has received the front video information.

2. The method according to claim 1, including using a cable television video-
on-demand system to perform the video-on-demand method.

20 3. The method according to claim 1, including using a computer network video-
on-demand system to perform the video-on-demand method.

4. The method according to claim 1, including using an intermediate video-on-
demand system to perform the video-on-demand method

5. The method according to claim 1, wherein the unused channel is selected to output the video information directly if the second user terminal does not select a common video information as the first user terminal.

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6. The method according to claim 1, wherein the video information includes video and audio information.

7. The method according to claim 1, further comprising of:
10 listing an information index; and
allowing the user terminals to select the required video information among the information index.

8. A video-on-demand system to reduce network bandwidth use thereby,
15 applying to reduce bandwidth use for a plurality of user terminals to receive a common video information with a time interval from each other, wherein the time interval indicates that a second user terminal starts receiving a video information before a first user terminal finishes receiving the video information, the system comprising:

a video server, to determine whether the user terminals receive the common
20 video information within the time interval;

a display installed at each of the user terminals to output the video information selected by the user terminal; and

a set top box installed at each of the user terminals and connected to the display and the video server via a communication network, each of the set top boxes further comprising a plurality of tuners, wherein

when the first and second user terminals receive the video information within
5 the time interval, the set top box of the second user terminal starts storing a rear video information that the first user terminal is currently receiving via a first tuner, and the video server outputs a front video information that the first user terminal has received within the time interval to the second user terminal via a second tuner, so that the set top box of the second user terminal continuously outputting the stored rear video
10 information to the display after outputting the front video information thereto.

9. The system according to claim 8, wherein each of the set top boxes further comprises of:

a row unit, connected to the video server via the communication network and
15 including the tuners to divide the video information transmitted through the network into the front video information and the rear video information ;

a process unit, connected to the row unit to output the front video information and to output the rear video information, wherein the stored rear video information is continuously transmitted before the front video information has been transmitted; and

20 a display unit, connected to the process unit and the display to output one of the front and rear video information to the display.

10. The system according to claim 9, wherein the process unit comprises:

a storage unit, connected to the row unit to store the rear video information transmitted by the first tuner; and

a decode unit, connected to the row unit, the storage unit and the display unit to decode and output the front and rear video information to the display unit.

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11. The system according to claim 8, wherein the display includes a television.

12. The system according to claim 8, wherein the display includes a computer system.

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13. The system according to claim 8, wherein the video-on-demand system includes a cable television video-demand system.

14. The system according to claim 8, wherein the video-on-demand system includes a computer network video-demand system.

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15. The system according to claim 8, wherein the video-on-demand system includes an intermediate video-demand system.

20 16. The system according to claim 8, wherein the video information comprises video and audio information.

17. The system according to claim 8, wherein the communication network comprises an analog network.

18. The system according to claim 8, wherein the communication network comprises a digital network.